

**MEMORANDUM OF UNDERSTANDING BETWEEN
COLLABORATIVE COMPOSITE SOLUTIONS
AND
THE COMPOSITE RECYCLING TECHNOLOGY CENTER**

THIS MEMORANDUM OF UNDERSTANDING is entered into by and between COLLABORATIVE COMPOSITE SOLUTIONS a Tennessee not-for-profit ("CCS"), and the COMPOSITE RECYCLING TECHNOLOGY CENTER, a Washington non-profit corporation, (the "CRTC") (from time to time hereafter referred to individually as "Party" and collectively as the "Parties"), for the purpose of confirming each Party's interest in a mutual COMMITMENT to collaborate on material, equipment, facilities, technology, personnel or any or all of these items.

RECITALS

WHEREAS, CRTC is created as a federal 501(c)3 non-profit with the express purpose to benefit Clallam County, Washington by creating a new, world-leading enterprise for reclaiming, recycling, and reprocessing carbon fiber composites, whose primary purposes are to reduce the amount of unutilized composite waste material; provide expanded workforce development for highly-trained composite technicians working with advanced composite manufacturing and recycled composite process technologies; conduct research and apply expertise in composite manufacturing and recycling technology; and enable businesses to incorporate recycled composites into their product lines across a wide variety of sectors; and

WHEREAS, CCS is created as a federal 501(c)3 non-profit with the express purpose of enabling collaboration and opportunities for companies and research institutions to rapidly and broadly implement advanced composite manufacturing solutions across a broad portfolio which includes applications in wind energy, automotive light-weighting, and pressure vessels for gas storage; and CCS is committed to establishing facilities, personnel, and advanced manufacturing demonstration equipment, as a component of its mission as a National Innovation Institute. CCS includes in its mission development of recycling technology solutions to address the issues necessary to resolve within a rapidly growing carbon fiber composite industry; and

WHEREAS, CCS and the CRTC share a mutual commitment to reducing the amount of composite material entering the waste stream and to finding beneficial applications for this material, and the Parties share a mutual commitment to increasing manufacturing opportunities for advanced composites in a multitude of applications and specifically on priorities in clean technologies;

UNDERSTANDING

1. CCS and CRTC are committed to working collaboratively to enable a variety of manufacturing solutions that incorporate recycled, recovered, and repurposed composite materials. Toward this end, the CCS will enable membership in the IACMI consortium for CRTC.

2. The CRTC will represent CCS as a member institution, and will act as the primary portal for the CCS to West Coast research organizations, industry, and academic institutions. The CRTC will reach out to its contacts and partners to assist in advancing the CCS and/or IACMI

goals. These additional parties may make their agreements directly with CCS as negotiated separately to CRTC.

3. Parties will each appoint a senior-level Technical Manager as liaison to the other. Through these individuals, the Parties will (a) develop an action plan and roadmap for their proposed joint efforts for approval by Management; (b) identify non-proprietary process and manufacturing knowledge and resources accessible to each party to enhance their respective missions; and (c) determine areas of interest common to both Parties to enhance the success of the venture and continually expand opportunities to recycle additional waste composite materials.

4. The CRTC will identify and develop product opportunities using recycled composite scrap, and develop process and product manufacturing technologies to achieve market-ready capability; and the Parties together will identify IP and marketing capability to enhance the use of recycled composite materials. The CRTC will additionally identify manufacturing approaches and opportunities to enhance the success of CCS, and make these available to CCS and their membership under mutually agreed-upon IP arrangements.

5. The Parties agree to cooperate in enabling funding opportunities in addressing composite recycling, and CCS and the CRTC will look to developing mutually beneficial funding streams and approaches.

6. The CRTC will ensure accessibility of its technology to CCS's supplier network, under mutually agreeable terms, to allow development and spin-off of product and process technologies, and provide for opportunities to expand from regional opportunities to national and eventually global capability for recycled composite usage.

7. CCS will enable access to its facilities and equipment and those of its member institutions where appropriate for the purposes of advancing research and commercial opportunities identified and developed by CRTC under mutually acceptable terms.

8. The Parties agree to share educational and workforce training opportunities, to include a) exchange of interns and personnel for work terms in the others' facilities; b) sharing of approaches and educational materials (and program knowledge and opportunities) to mutually enhance respective educational and social missions; and c) identification and promotion of corporate internship and fellowship opportunities for access by the other Party.

9. Neither Party shall make any public communication nor publication of their relationship, this MOU, the materials and information provided, except with prior written approval of the other Party, whose approval or disapproval may be made at that Party's sole discretion.

COLLABORATIVE COMPOSITE SOLUTIONS



Craig Blue
Chief Executive Officer

3/14/16

Date

COMPOSITES RECYCLING TECHNOLOGY CENTER

Robert Larsen
Chief Executive Officer

Date